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OFFICE OF PETITIONS

PTO/SB/21 (6-98)

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/090,827
	Filing Date	March 6, 2002
	First Named Inventor	Francois Bertelli
	Group Art Unit	1637
	Examiner Name	
Total Number of Pages in This Submission	Attorney Docket Number	A0000179-C1-66-MG

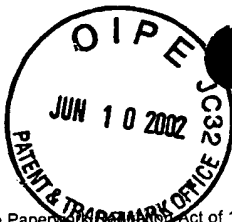
ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Additional Enclosure(s) (please identify below): Copy of Notification of Omitted Item(s) Petition Under 37 CFR 1.17(h) Certificate of Exoress Mail Return Postcard
Remarks This submission is a Petition Under 37 CFR 1.17(h) in response to a Notice of Omitted Item(s) in a Nonprovisional Application		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Mehdi Ganjeizadeh
Signature	
Date	June 10, 2002

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: <input type="text"/>			
Typed or printed name			
Signature		Date	

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) 130.00

Complete if Known

Application Number	10/090,827
Filing Date	March 6, 2002
First Named Inventor	Francois Bertelli
Examiner Name	
Group Art Unit	1637
Attorney Docket No.	A0000179-C1-66-MG

METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number: 23-0455
Deposit Account Name: Warner-Lambert Company

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ Payment Enclosed:
☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 710	201 355	Utility filing fee	(1.00)
106 320	206 160	Design filing fee	
107 490	207 245	Plant filing fee	
108 710	208 355	Reissue filing fee	
114 150	214 75	Provisional filing fee	

SUBTOTAL (1) (\$) 0.00

2. EXTRA CLAIM FEES

Total Claims: 20** = 18.00 x 0.00 = 0.00
Independent Claims: 0 = 0.00 x 0.00 = 0.00
Multiple Dependent Claims: 0.00 = 0.00

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103 18	203 9	Claims in excess of 20
102 80	202 40	Independent claims in excess of 3
104 270	204 135	Multiple dependent claim, if not paid
109 80	209 40	** Reissue independent claims over original patent
110 18	210 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for ex parte reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 390	216 195	Extension for reply within second month	
117 890	217 445	Extension for reply within third month	
118 1,390	218 695	Extension for reply within fourth month	
128 1,890	228 945	Extension for reply within fifth month	
119 310	219 155	Notice of Appeal	
120 310	220 155	Filing a brief in support of an appeal	
121 270	221 135	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	
141 1,240	241 620	Petition to revive - unintentional	
142 1,240	242 620	Utility issue fee (or reissue)	
143 440	243 220	Design issue fee	
144 600	244 300	Plant issue fee	130.00
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Processing fee under 37 CFR 1.17(a)	
126 180	126 180	Submission of Information Disclosure Stmt	
581 40	581 40	Recording each patent assignment per property (times number of properties)	
146 710	246 355	Filing a submission after final rejection (37 CFR § 1.129(a))	
149 710	249 355	For each additional invention to be examined (37 CFR § 1.129(b))	
179 710	279 355	Request for Continued Examination (RCE)	
169 900	169 900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 130.00

SUBMITTED BY

Name (Print/Type)	Mehdi Ganjeizadeh	Registration No. (Attorney/Agent)	47,585	Telephone	(734) 622-3831
Signature		Date	June 10, 2002		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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UNITED STATES PATENT AND TRADEMARK OFFICE IS IN RECEIPT OF A
CONTINUATION PATENT APPLICATION INCLUDING THE FOLLOWING:

1. UTILITY PATENT APPLICATION TRANSMITTAL (1 PG)
2. FEE TRANSMITTAL (1 PG)
3. A SPECIFICATION ON (26 PGS) REFERENCES ON (4 PGS)
4. SEQUENCE LISTING ON (20 PGS)
5. 5 CLAIMS ON (1 PG)
6. FIGURES ON (5 PGS) AN ABSTRACT ON (1 PG)
7. COPY OF PRIOR COMBINED DECLARATION AND POWER OF ATTORNEY (5 PGS)
8. REQUEST FOR TRANSFER OF COMPUTER READABLE FORM UNDER 37 CFR 1.821(e) (1 PG), AND PAPER COPY OF SEQUENCE LISTING (43 PGS)
9. COPY OF PRIOR IDS ON (3 PGS)
10. CERTIFICATE OF EXPRESS MAIL (1 PG)
11. AUTHORIZATION TO CHARGE THE FEE AND ANY ADDITIONAL FEES AS NECESSARY OR CREDIT ANY OVERPAYMENT TO DEPOSIT ACCOUNT 43-0455 IS HEREBY GIVEN.
12. RETURN POSTCARD

INVENTOR(S) FRANCOIS BERTELLI, ET AL.

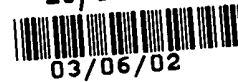
INVENTION ENTITLED "METHOD FOR THE SCREENING OF ALPHA2DELTA-1
SUBUNIT BINDING LIGANDS"

MARCH 6, 2002

MG:AR

EXPRESS MAIL NO. EJ054450643US
PD-A0000179-C1-66-MG

JC979 U.S. PTO
10/090827



PATENT DEPT

MAR 26 2002

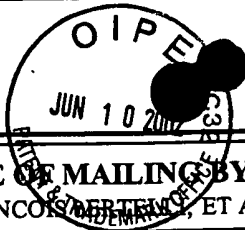
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**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): FRANCOIS, DEBIEUX, ET AL.

Docket No.

A0000179-C1-66-MG

Serial No.

Filing Date

Examiner

Group Art

Invention:

Method for the Screening of Alpha2Delta-1 Subunit Binding Ligands

I hereby certify that this

Utility Application

(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under

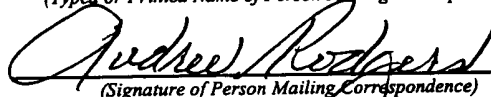
37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231

on March 6, 2002

(Date)

Audree Rodgers

(Typed or Printed Name of Person Mailing Correspondence)



(Signature of Person Mailing Correspondence)

EJ054450643US

("Express Mail" Mailing Label Number)

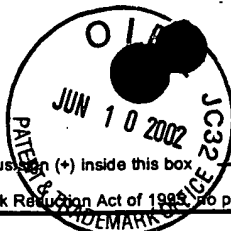
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PTO/SB/05 (11-00)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

A0000179-C1-66-MG

First Inventor

Francois Bertelli et al.

Title

METHOD FOR THE SCREENING OF ALPHA2DELTA-1 SUBUNIT
BINDING LIGANDS

Express Mail Label No.

EJ054450643US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification (Total Pages 57)
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☐ Drawing(s) (35 U.S.C. 113) [Total Sheets]
5. Oath or Declaration [Total Pages 5]
 - a. ☐ Newly executed (original or copy)
Copy from a prior application (37 CFR 1.63 (d))
 - b. ☒ (for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO:

Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - ☐ Computer Readable Form (CRF)
 - Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☒ paper
 - ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure ☒ Copies of IDS
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☐ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122
(b)(2)(B)(i). Applicant must attach form PTO/SB/35
or its equivalent.
17. ☒ Other: Request for Transfer of Computer Readable Form
Certificate of Express Mail

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No.: 09/397,549

Prior application information:

Examiner C. Wilder

Group Art Unit: 1655

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label

(Insert Customer No. or Attach bar code label here)

or

☐ Correspondence address below

Name

Mehdi Ganjeizadeh

Address

Warner-Lambert Company

2800 Plymouth Road

City

Ann Arbor

State

Michigan

Zip Code

48105

Country

U.S.A.

Telephone

(734) 622-3831

Fax

(734) 622-1553

Name (Print/Type)

Mehdi Ganjeizadeh

Registration No. (Attorney/Agent)

47,585

Signature

Mehdi Ganjeizadeh

Date

March 6, 2002

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EXPRESS MAIL NO. EJ054450643US
A0000179-C1-66-MG

TITLE OF THE INVENTION: Method for the screening of $\alpha_2\delta$ -1 subunit binding ligands

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This application is a Continuation of USSN 09/397,549 filed September 16, 1999; the
5 entire contents of which are herein incorporated by reference.

FIELD OF THE INVENTION

The invention relates to a method for the screening of ligands which bind a soluble secreted cerebral cortical voltage-dependent calcium channel $\alpha_2\delta$ -1 subunit polypeptide.

10 **BACKGROUND OF THE INVENTION**

Gabapentin (1-aminoethyl-cyclohexane acetic acid) is currently commercialized for the treatment of epilepsy. The compound has however been recognized as being also useful for the treatment of pain and anxiety.

15 Recent reports have suggested an interaction between gabapentin and the $\alpha_2\delta$ subunit of a voltage-dependent calcium channel (VDCC). But electro-physiological studies have yielded conflicting data on the action of gabapentin at VDCCs, even though the relevance of the interaction of gabapentin at the $\alpha_2\delta$ subunit to the clinical utility of the drug is becoming clearer. However, none of the prototype anticonvulsant drugs displace
20 [^3H]gabapentin binding from the $\alpha_2\delta$ -1 subunit.

The most frequently used assay currently available for the screening of ligands that bind the $\alpha_2\delta$ subunit involves the use of pig membrane extracts as a source of the $\alpha_2\delta$ subunit. Such an assay presents major inconvenience. Firstly, because the assay material is a
25 membrane extract, it is very difficult to accurately determine the protein composition from one assay preparation to another particularly with regard to the subtype. Also, the presence of various impurities in the assay preparation is a problem in small plate assays. Furthermore, as the protein preparation lacks homogeneity, the interaction between the targeted protein and the assay plate is often quite uneven. This renders the streamlining of
30 the assay in a high throughput format almost impossible to achieve.

Utility Application

EXPRESS MAIL NO. EJ054450643US
A0000179-C1-66-MG



UNITED STATES PATENT AND TRADEMARK OFFICE



COMMISSIONER FOR PATENTS
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WASHINGTON, D.C. 20231
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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/090,827	03/06/2002	Francois Bertelli	A0000179-C1-66-MG

CONFIRMATION NO. 6882

RECEIVED FORMALITIES LETTER

JUN 28 2002 0000000007827838*

Mehdi Ganjeizadeh
Warner-Lambert Company
2800 Plymouth Road
Ann Arbor, MI 48105

OFFICE OF PETITIONS

Date Mailed: 04/09/2002

NOTICE OF OMITTED ITEM(S) IN A NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

A filing date has been accorded to the above-identified nonprovisional application papers; however, the following item(s) appear to have been omitted from the application:

- Page(s) 30 of the specification (description and claims).

I. Should applicant contend that the above-noted omitted item(s) was in fact deposited in the U.S. Patent and Trademark Office (USPTO) with the nonprovisional application papers, a copy of this Notice and a petition (and \$130.00 petition fee (37 CFR 1.17(h))) with evidence of such deposit **must** be filed within **TWO MONTHS** of the date of this Notice. The petition fee will be refunded if it is determined that the item(s) was received by the USPTO.

II. Should applicant desire to supply the omitted item(s) and accept the date that such omitted item(s) was filed in the USPTO as the filing date of the above-identified application, a copy of this Notice, the omitted item(s) (with a supplemental oath or declaration in compliance with 37 CFR 1.63 and 1.64 referring to such items), and a petition under 37 CFR 1.182 (with the \$130.00 petition fee (37 CFR 1.17(h)) requesting the later filing date **must** be filed within **TWO MONTHS** of the date of this Notice.

III. The failure to file a petition (and petition fee) under the above options (I) or (II) within **TWO MONTHS** of the date of this Notice (37 CFR 1.181(f)) will be treated as a constructive acceptance by the applicant of the application as deposited in the USPTO. **THIS TWO MONTH PERIOD IS NOT EXTENDABLE UNDER 37 CFR 1.136(a) or (b).** In the absence of a timely filed petition in reply to this Notice, the application will maintain a filing date as of the date of deposit of the application papers in the USPTO, and original application papers (*i.e.*, the original disclosure of the invention) will include only those application papers present in the USPTO on the date of deposit.

In the event that applicant elects not to take action pursuant to options (I) or (II) above (thereby constructively electing option (III)), amendment of the specification to renumber the pages consecutively and cancel incomplete sentences caused by any omitted page(s), and/or amendment of the specification to cancel all references to any omitted drawing(s), relabel the drawing figures to be numbered consecutively (if necessary), and correct the references in the specification to the drawing figures to correspond with any relabelled drawing figures, is required. Any drawing changes should be accompanied by a copy of the drawing figures showing the proposed changes in red ink. Such amendment and/or correction to the drawing figures, if necessary, should be by way of preliminary amendment submitted prior to the first Office action to avoid delays in the prosecution of the application.

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A copy of this notice MUST be returned with the reply.

JA

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Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE